2nd August 1932] [Mr. R. N. Arogyaswami Mudaliyar]

"Then, Sir, with reference to the purchase of two new dredgers for Kistna Central Division, I wish to know whether it is not possible to carry on the work with the existing dredgers only for some more years by repairing them."

* The hon. Sir ARCHIBALD CAMPBELL:—"Sir, the maximum total expenditure which is likely to be incurred by the Central Board of Irrigation is about Rs. 47,500. I am afraid I have not got details of the actual items of expenditure. But I will certainly ask the Government of India to give us those details.

"As regards the purchase of new dredgers, the existing dredgers were purchased in 1893 and they have been working ever since. The machinery has become worn out, the main crankshafts were broken in 1930 and have been temporarily patched up; the boiler of one has been condemned and the working pressure of the other has been reduced from 80 lb. to 60 lb.; the repairing charges are very heavy. I will however communicate the suggestions of my hon. Friend Mr. Arogyaswami Mudaliyar to the Chief Engineer and ask him whether the expenditure can be safely reduced by adopting them."

The demand was put and carried and the grant was made.

GRANT XXI—AGRICULTURE—TRANSFERRED.

* The hon. Mr. P. T. RAJAN:—"On the recommendation of His Excellency the Governor I beg to move—

'*that Government be granted a further sum not exceeding Rs.* 100, *under Demand XXI—Agriculture—Transferred.*'

"Sir, this sum is required for making provision for carrying out experiments in connexion with dry cultivation in the lower Bhavani project. Sir, in connexion with this scheme the Director of Agriculture has proposed to make certain experiments in consultation with the Irrigation department. These experiments are considered to be necessary and they have to be carried out immediately. The duration of these experiments will be about ten months. The items of expenditure are given in the Explanatory Memorandum. After all the expenditure can be met by reappropriation in the present year's budget. I hope the House will grant this demand."

* Diwan Bahadur R. N. AROGYASWAMI MUDALIYAR:—"I beg to move— 12 noon.

'*that the grant be reduced by Re.* 1.'

"At the outset I may remark that I think that this grant should rather come under an Irrigation Demand rather than under an Agricultural Demand. But the object with which I have moved this amendment is to ask the Government the grounds on which they have made up their minds to treat this Lower Bhavani project as a dry crop scheme and not as a wet crop scheme. I should like to know the data on which they have come to this conclusion. The principle on which irrigation schemes are classed as dry crop or wet crop is briefly as follows. A dry crop scheme can only succeed when the total annual rainfall

or the seasonal rainfall is so low as to necessitate the demand for irrigation water. Whereas in the case of areas where the average rainfall is sufficiently great, dry crop schemes are impossible. If you look at the rainfall on the Lower Bhavani area you will find that it varies from 20 to 40 inches. An area where the average rainfall is about 30 inches is, in my opinion, entirely unsuited for dry crop irrigation schemes, because the ryot will get what he wants from the rainfall alone. I should therefore like to know on what grounds the Government have come to the conclusion to treat the Lower Bhavani scheme which was originally designed as a wet crop scheme, as a dry crop scheme. The total area commanded is not more than two or three times the wet irrigation area originally proposed under the Lower Bhavani scheme. Do the Government hope to get a sufficient area of dry crop irrigation to justify the scheme and make it productive? It seems to me that before you go on with experiments on demands of water for various kinds of dry crops and so forth, these fundamental questions will have to be discussed, considered and answered. Have the Government done that?

"I shall now come to the question of these dry crop experiments. I do not know how the proposal originated. We have got, if not in this Presidency, certainly in this country, an enormous amount of literature on this question of dry crop irrigation. It has been in vogue ever since irrigation started in the Punjab and the United Provinces and for years and years irrigation officers in these Provinces have conducted experiments, collected data and published them. Have the Government studied all this? How did they find out the necessity for further experiments? What will they find after experimenting on an area of 16 acres for a period of ten months? Why should they discard the mass of information that is available? Why do they not base their schemes on the enormous data that are available to anyone who is willing to go into them? Do the Government think that they can get any reliable data from their experiments conducted for a period of ten months? I should rather think that the experiments should go on for a period of ten years. Because, to put only one objection, when your experiments are going on you may get rainfall. What inference will you draw as to the total requirements of water for a particular acreage on which you are experimenting? It seems to me, Sir, that the proposal does not fully take into account not merely the mass of information available on the subject but even the elementary requirements of a case like this. Assuming that we have not got any data available on this question, to say that by experiments conducted in a small area over a short period of ten months we will be able to collect data sufficiently satisfactory to base our schemes on is, I think, nothing short of absurdity. Rainfall varies from year to year; in one year we have 20 inches and in another year we have 40 inches. Must you not at least carry on experiments over a period of five or six years so that you may exhaust the varying conditions of rainfall from year to year? I doubt very much whether the scheme now put before the House has been well considered. As I said before, the scheme was worked out as a wet

crop scheme many years ago for very adequate reasons. I fail altogether to see the reasons which have induced the Government to alter their minds, I do not even know if they have altered their decision or whether they are simply going to experiment with dry crop irrigation and then go back to wet crop irrigation. I merely ask for information on all these points. I should like that this question is postponed until we know the elementary facts about this thing. Otherwise, I am afraid they will be conducting experiments which may prove perfectly futile and thoroughly inadequate.

"Again, supposing there were no data available at all, why should not the Government conduct these experiments on their Coimbatore Central Farm itself? They have a big establishment there. There is a channel from the Noyyal river passing through the farm; there are wells provided with pumps. There are all kinds of soils. Why do not the Government select a plot there and ask the Farm Establishment to collect this information? It is the work of the Agricultural Department and if they have not got the information already they will do well to collect it now. I should like my hon. Friend to answer these questions if he can."

* Mr. A. Ranganatha Mudaliyar:—"Mr. President, my hon. Friend, the Chief Minister, thinks that these experiments should be conducted also for the Ceded districts. I entirely agree with him. I will say for his information and for the information of his hon. Colleague that, long, long ago, the Agricultural department wanted to find out whether the dry lands in the Ceded districts could be profitably irrigated or not. It was with that object that the Hagari Farm was started. Different experiments were proposed to be conducted there with reference to dry, and possibly wet, crops also. As my hon. Friend, Mr. Arogyaswami Mudaliyar, has pointed out, there are lands already in the possession of the Government where the experiments under contemplation by the Government could be conducted. I do not see the need for acquiring or leasing fresh lands when already they have lands of different kinds at their disposal. After all there is no reliability in the results of experiments, conducted over a short period. Some peculiar and unexpected conditions may crop up and make the results unsafe for any definite inference to be drawn from them. I therefore think that the hon. the Minister will be well advised to drop this scheme and see if he cannot carry out systematic experiments on the different soils already in the possession of Government."

* Diwan Bahadur C. S. Ratnasabhapati Mudaliyar:—"Sir, the Government have two objects in the experiments they are going to conduct. The first is to find out the water requirements of dry crops and the second is to obtain data with regard to first and second crop ayacuts. So far as the second object is concerned I have the least objection to it. It is very necessary. But I have my own misgivings with regard to the first object. When the Upper Bhavani project was taken up the Government deputed an I.C.S. officer to investigate the water requirements of dry crops. What the Special Officer did we do not know. The people of Coimbatore do not know the gentlemen whom

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the Special Officer interviewed in the areas in which he was conducting his investigation. But all of a sudden we heard that the Special Officer had reported that with regard to the Upper Bhavani project dry crop irrigation would be a failure. He seems to have reported that owing to the loss of water due to evaporation and to heavy absorption on account of the porosity of the soil, the scheme will not succeed. I have my own misgivings that with regard to the Lower Bhavani project also the Government might say that the water that can be stored under the Lower Bhavani project will not be sufficient for dry crop irrigation and the project should be abandoned. Therefore I want an assurance from the hon. Minister for Public Works and the hon. Member for Irrigation that at the end of these experiments they will not say that the scheme will be a failure and should therefore be abandoned. I am anxious that the Government should not repeat the history of the Upper Bhavani project in the case of the Lower Bhavani project also."

* Mr. S. H. SLATER:—" Mr. President, Sir, the amendment moved by the hon. Member opposite would have the effect of giving a wider scope to the discussion than was intended by the Government. The hon. Member raised the question whether the Government have considered and made up their minds finally as to whether the Lower Bhavani project should be undertaken as a wet irrigation project or a project for the irrigation of dry crops. He seemed to think that no consideration had been paid to the immense volume of literature on the subject of dry crop irrigation which has been collected in various parts of India. I have no doubt that that literature has been carefully studied, and though I am not departmentally in a position to say whether the Government have finally decided the question or not, I imagine that the experiment now proposed is one of the factors which will be taken
12-15 p.m. into consideration before the final decision is made. But certainly, speaking as one guilty or, at any rate, responsible, to a certain extent for the latest reports from the district on this point, I have personally endeavoured to support the case for taking up the Lower Bhavani scheme as a dry project. In this connexion there was one point mentioned by my hon. Friend Mr. Ratnasabhapati Mudaliyar to which I must refer. He seemed apprehensive whether in view of the discouraging and frigid report which caused the abandonment of the Upper Bhavani project we are justified in conducting this experiment on the Lower Bhavani, and whether we would not meet with precisely the same difficulties and disappointments. I think it necessary to point out that this is a very much more modest scheme with a much shorter main channel which will obviate a great deal of the loss or wastage of water. The intention is to provide this irrigation as supplementary to the crops which are raised by rainfall at present. The most delicate part of the task of the Engineering department is to arrange for a supply of water so as to coincide with the season in each half of its area when the rainfall is at its lowest. The object of this little experiment, of which my hon. Friend opposite spoke with apparent contempt, is to educate the ryot as to the advantages, in that particular area, of dry crop irrigation as compared with wet crop irrigation.

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" In order to ensure that the cultivators in that area will be ready to accept the scheme and agree to pay the water-rate it is considered desirable by the Director of Agriculture—whose opinion the Government have accepted—that the ryot should be shown by experiments on his own ground—in his own area and not elsewhere—the advantages which will accrue, and the amount of water that will be required actually in practice. The experiments should be conducted in the very area of the project and not elsewhere in other parts of India. We want to make experiments in the very area which is going to be benefited by this project.

" I think—if I may say so—the hon. Member who moved the amendment has deliberately ignored the explanatory note which accompanied the Demand for this Grant. It says:—' At present the ryot, after shallow cultivation, irrigates his land grown with cholam, cumbu or ragi once in five or six days. The issue is whether land with the same crops may be irrigated at longer intervals, say, once in ten days, whether with shallow or deep cultivation.' This is the justification for this minor experiment, which is covered by the demand for this supplementary grant, which the hon. Minister has brought forward. I therefore oppose the amendment. I hope the House will not be tempted to follow the hon. Member in a general excursion into the relative advantages of wet and dry crop irrigation."

* Diwan Bahadur R. N. Arogyaswami Mudaliyar:—" Sir, I am somewhat in a difficulty to find out as to what exactly the last speaker meant. I asked, Sir, whether the Government have definitely made up their minds. He has not told us whether they have made up their minds or not. My hon. Friend has completely ignored the question of rainfall, the suitability of the project and the total rainfall in that area. I want to know whether the hon. Minister has gathered the necessary information. What I suggested was that you could take advantage of the experience gained in other parts of India as it would be applicable with regard to the Lower Bhavani area. These two main points have not been answered at all. But of course it is not my intention to press my amendment because, after all, I am as much interested as my hon. Friend, the Minister in getting this project through without the least possible delay. It seems to me that these small experiments seem to be devised for delaying the carrying out of the scheme still further."

The amendment was, by leave, withdrawn.

* Mr. K. Koti Reddi:—' Mr. President, Sir, I move—

' *that the Demand of Rs.* 100 *for Agriculture—Transferred, be reduced by Re.* 1.'

" I wish to know from the hon. Minister why similar experiments should not be made in the Ceded districts. My hon. Friend, Mr. Ranganatha Mudaliyar, has pointed out that there is great necessity for trying the same experiment in that area. I am glad that the Government has come forward to make these experiments in some area.

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"Another point I wish to refer to is if the Government wants to take up the Tungabhadra or Tungabhadra-Kistna project in the Ceded districts, they should conduct experiments to see how far the dry black cotton soil can be utilized for irrigation purposes. The original Tungabhadra project was intended to supply water for dry cultivation, to supply water for cholam and cotton crops. With regard to the question of irrigating the black cotton soil, no experiments have so far been made. If the Tungabhadra-Kistna project has to be successfully worked out, some portions of dry lands may have to be utilized for irrigation purposes."

* The hon. Mr. P. T. Rajan:—"Sir, my hon. Friend in charge of Irrigation wanted these experiments to be conducted. If the Government propose to carry out the same experiments in other places, the Department of Agriculture will certainly be very glad to help. The Agricultural Department is only helping the Irrigation Department in finding out what amount of water will be required, say, for an acre. It has been pointed out that the period of 10 months is a very short one. If necessary, it may be extended. We shall then come before this House and ask for further sanction.

"With regard to the remarks of my hon. Friend, Mr. Koti Reddi, the Agricultural Department would be very glad to carry out experiments and give facilities to any portion of the Ceded districts, if new schemes are introduced there."

The amendment was, by leave, withdrawn.

The main demand for Rs. 100 was put and carried and the grant made.

GRANT XXIX—CIVIL WORKS—TRANSFERRED AND RESERVED.

* The hon. Mr. P. T. Rajan:—"Sir, on the recommendation of His Excellency the Governor, I beg to move—

> '*that the Government be granted a further sum not exceeding Rs. 100 under Grant XXIX—Civil Works—Transferred and Reserved.*'

"This demand is to provide for electric installation in the residences of Government Officers in Guntur. I do not think it is necessary to make out a case for the introduction of electric installation in these buildings. As is stated in the note, the amount required for this purpose can be met by reappropriation. The Government will not be a loser if this work is carried out as the amount will be recovered by way of increased rent for the buildings. I hope the Council would be pleased to pass this motion."

The demand was put and carried and the grant made.

GRANT XXXII—FAMINE RELIEF—RESERVED.

* The hon. Sir Archibald Campbell:—"Mr. President, Sir, on the recommendation of His Excellency the Governor, I beg to move—

> '*that the Government be granted a further sum not exceeding Rs. 2,75,000 under Grant XXXII—Famine Relief—Reserved.*'